

DOMINION OFFROAD

Phone: 626-Trails1 or 626-872-4571

Jeep JK

AIR SYSTEM INSTALLATION

Required Tools and Materials:

- 13mm Wrench (preferably a ratcheting wrench)
- 10mm Wrench
- 5/16" Open End Wrench
- $\frac{3}{4}$ " Open End Wrench
- Philips Head Screw Driver
- Heat Gun or butane torch
- Large Standard Screw Driver
- Crescent / Adjustable Wrench
- 9/16" Open End Wrench
- 18mm Open End Wrench
- Electrical Connector Crimp Tool
- Torx Wrench Set

Warnings and tips before you start:

*** ALWAYS! have the Engine Running, while running your Compressor

*** Thread Locker use (supplied with kit): Use on all fasteners (NOT Brass Fittings)

Shake well before each use - Clean surfaces, apply and assemble in usual manner. Avoid skin and eye contact, wash with water - **KEEP AWAY FROM CHILDREN SEE APPLICABLE MSDS.**

*** All brass fittings must be installed using Teflon Pipe Fitting Tape (supplied with kit).

Four wraps of white tape is recommended and will maximize fitting adjustability.

*** Industrial Interchange will work, however, Automotive Interchange Air Coupler Plugs work better.

*** Automatic / Combination Air Coupler require oiling with light lubricating oil. Do not use WD40 or any other penetrating oil.

*** This kit does not include all required parts to mount a Vair 450 series compressor.

*** Deviate from these instructions at your own risk.

If you are installing an Air Tank, perform that installation first

Installation Guide Videos Link:

www.DominionOffRoad.com/jk_obo_install

Check for the latest version of these instructions at:

www.DominionOffRoad.com/jk_obo_install



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626-Trails1 (626) 872-4571

Your DOR OBA kit has been upgraded to dual In-Cab Air Couplers for Free.

The following are the extra parts that have been included:

2	Brass .25" comp to .25" MPT
1	1/4" 90 Degree Elbow
1	.25" Air Hose 8'
1	Quick Coupler
1	Bulkhead Fitting
1	In-Cab Coupler Bracket
2	Coupler Dust Covers



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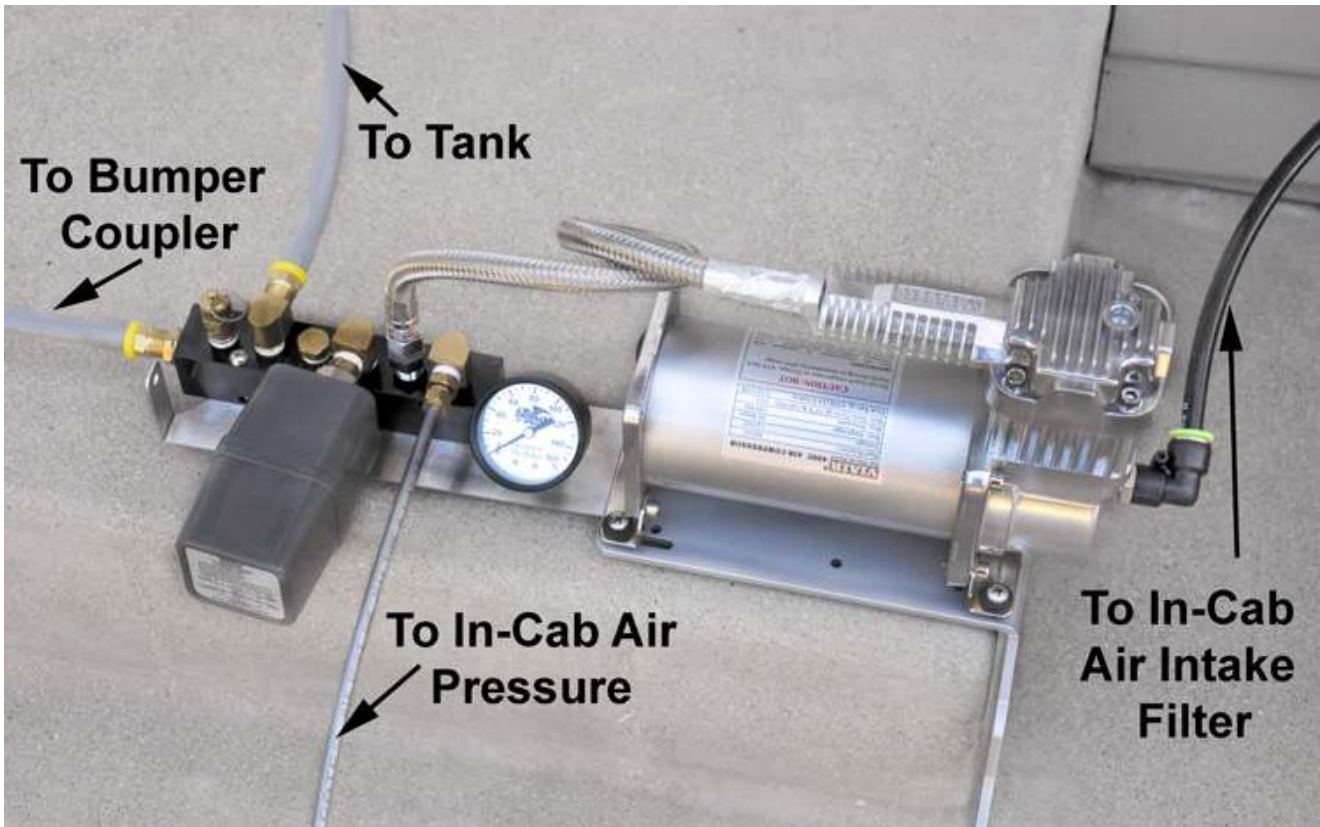
JEEP JK AIR SYSTEM - PARTS INVENTORY LIST

Missing Parts Hotline: 626-872-4571

Small Box	Small Box Non Bagged Items	1	Box and Label
		1	Compressor Bracket
		1	Instructions
		1	Engine Bay Pressure Gauge
		1	Air Junction Box
		1	Air Junction Box Bracket
		2	.25" Air Hose In-Cab Air Pressure 6'
		1	.25" Air Hose Long for Air Coupler 8'
	Bag 1 Wire Pack	5	ZipTie
		1	In-Cab Pressure Gauge Back Plate / Template
		1	Teflon Tape
		1	12 Gauge Wire
		1	16 Gauge Wire
		1	Thread Locker
		1	Fuse Holder
	Bag 2 Brass Pack	1	Fasteners Pack (Stainless Fasteners)
		2	Quick Coupler
		2	Dust Caps for Quick Coupler
		2	Bulkhead Fitting
		2	In-Cab Coupler Bracket
		4	1/4 MPT X 1/4FPT Street elbow
		5	Brass .25" comp to .25" MPT
		2	1/4X1/8 Brass Bushing
		1	3/8X1/4 NPT Bushing
		1	3/8" MPT Brass Plug
		1	1/4" MPT Brass Plug
		1	Burst Relief Safety Valve
	Bag 3 Electrical Pack	1	1/4" Push In to .125" FPT
		3	Plastic Washer
		3	16 Gauge Quick Connect
		2	12 Gauge Butt Connector
		2	12 Gauge Ring Terminal
		1	In-Cab Gauge
		1	Switch
		1	Fuse
		1	Air Intake 90 Fitting
		1	16 Gauge Butt Connector
	1	16 Gauge Wire Splice Snap Connector	
	Bag 4 Tank Kit	3	1/4" Brass Plugs
		1	1/4" Drain Cock
		1	1/4" 90 Degree Elbow
		1	Tank Mount Brackets, U-Bolts and Fasteners
1		Gray Air Tank Hose 18" with two Push-Lock Fittings	
Big Box Items	1	2 Gallon Air Tank	
	1	Pressure Switch	
	1	400C Compressor	

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System Reference Pictures:



1. Install brass fittings:

- Port 1 Optional Front Bumper Air Coupler Hose Connection or Plugged.
- Port 2 Pressure Safety Valve
- Port 3 Optional 90 Fitting for Air Tank Hose or Plugged.
- Port 4 Accessory Port or Plugged (Usually Plugged)
- Port 5 Pressure Switch 90 Fitting.
- Port 6 Compressor Leader Hose Port
- Port 7 In-Cab Pressure Gauge 90 Fitting
- Port 8 Engine Bay Pressure Gauge



2. Install the Compressor on the Compressor Mount Bracket and the 90 Fitting on the Compressor Air Intake Port (do not use Teflon Tape).

WARNING: Do not over tighten the Elbow fitting in the Intake Port



Install the Compressor/Bracket in the JK (Do not yet install the Air Junction Box)

Advisory: Do not bump, or pull the master cylinder away from the booster during this install. Doing so will dislodge the booster O-Ring. If the O-Ring becomes dislodged, do not drive the Jeep and contact tech support for additional information.

3. Using firm pressure and pushing as indicated in the following picture, bend the A/C hose toward the distributor cap in order to provide clearance for the bracket and compressor.



4. Loosely zip tie the vacuum hose as indicated in the previous picture, in order to assure at least $\frac{1}{2}$ " clearance around the compressor head.

5. Remove Driver's and Passenger's Side Master Cylinder Nuts as indicated below:



6. Remove the brake fluid sensor wire connector - With a small flat head screw driver, slide the red tab toward the passenger's side. Press the tabs and pull the connector off of the brake fluid reservoir.

7. Disconnect the small plastic wire clip indicated in the previous picture.

8. Thread the connector and wire bundle under the steel brake line and re-attach as indicated in the previous picture.

9. 13mm wrench - Remove both driver's and passenger's side master cylinder nuts.

10. Philips Head Screw Driver - Remove the Passenger Side ECU Mounting Bolt.

11. Using the previously removed factory nuts and bolt, install the bracket and compressor assembly.

If you purchased this kit with an Air Tank, install the Air Tank before you proceed.

12. Your Air Tank Hose should be installed on the Tank.

Advisory: Your Air Tank Hose Fittings are installed using Silicone Lubricant. This helps so the Fittings can swivel inside the Hose. Using a 9/16" wrench on the fitting, twist the hose to break the Fitting Loose. If the fitting will not Swivel, you must install the Air Junction Box onto the Hose Assembly prior to installing the Air Junction Box onto the Air Junction Box Bracket.

13. If you purchased a Front Bumper Air Coupler Kit, install the Hose to the Air Junction Box.

14. Pressure Switch - Install the Pressure Switch on the Air Junction Box.

15. (2) 1 $\frac{3}{4}$ " Stainless Fasteners, Nuts and Thread Locker - install the Air Junction Box onto the Stainless Steel Air Junction Box Mount Bracket.

16. As necessary, adjust the Pressure Switch and Air Tank Hose Fittings, to insure clearance.

17. Install the Compressor Leader Hose, onto the Air Junction Box. Twist the leader hose at the Air Junction Box end in order to form a clean coil.

In-Cab Pressure Gauge and Switch Installation

18. Install the In-Cab Air Pressure Hose (Silver 1/4" OD Brake Line). Soaking the hose end in hot water may make it easier to install the hose on the brass fitting. Tighten the Brass Collar until it stops turning against the brass fitting. The following three mount locations have been identified in the JK:



19. Use the White Nylon Washers and Switch and Gauge Backing Plate/Template to drill and mount the Pressure Gauge and Switch.

Advisory: Watch the installation video at: www.dominionoffroad.com/jk_oba_install/

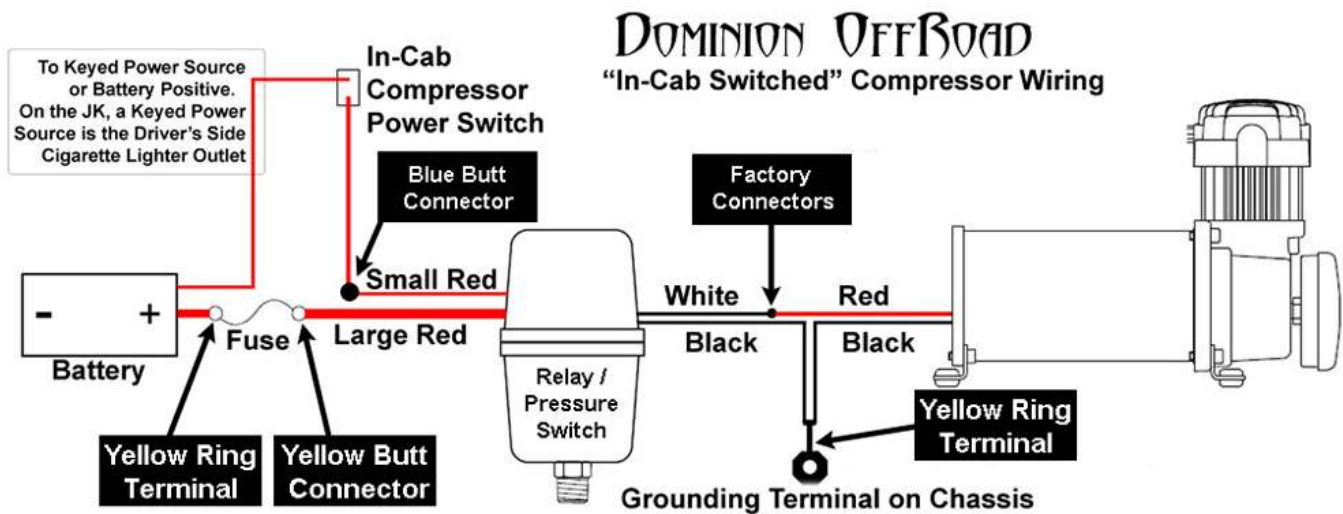
20. Wire the Compressor according to the following Diagram:

Advisory: Other than the White Pressure Switch Wire and Red Compressor Wire Connectors, cut off and discard all Viar Wire Connectors.

Advisory: The Black Pressure Switch Wire and Black Compressor Wire will be striped and twisted together, prior to installing the Ring Terminal.

Advisory: All Engine Bay Connectors are Heat Shrinkable and Adhesive Lined. Use a heat gun, lighter or equivalent to shrink and seal the connector covers

Advisory: To enable the LED on the Switch, See the diagram on the back of the switch. Wire Earth as Ground - Load to the Pressure Switch - Supply to Positive Power Source



In-Cab Air Coupler Installation

21. Air Coupler, Bulkhead Fitting, Compression Fitting and 8' Hose - Assemble as indicated in the following Picture (remove the Bulkhead Nut and Lock Washer):



22. Air Coupler Mount Bracket - Install the Stainless Steel Air Coupler Bracket, as indicated in the following picture:



23. Air Coupler / Hose Assembly, Bulkhead Nut and Lock Washer - According to the previous picture, thread the Hose through the Coupler Bracket, Bulkhead Lock-Washer and Bulkhead Nut.

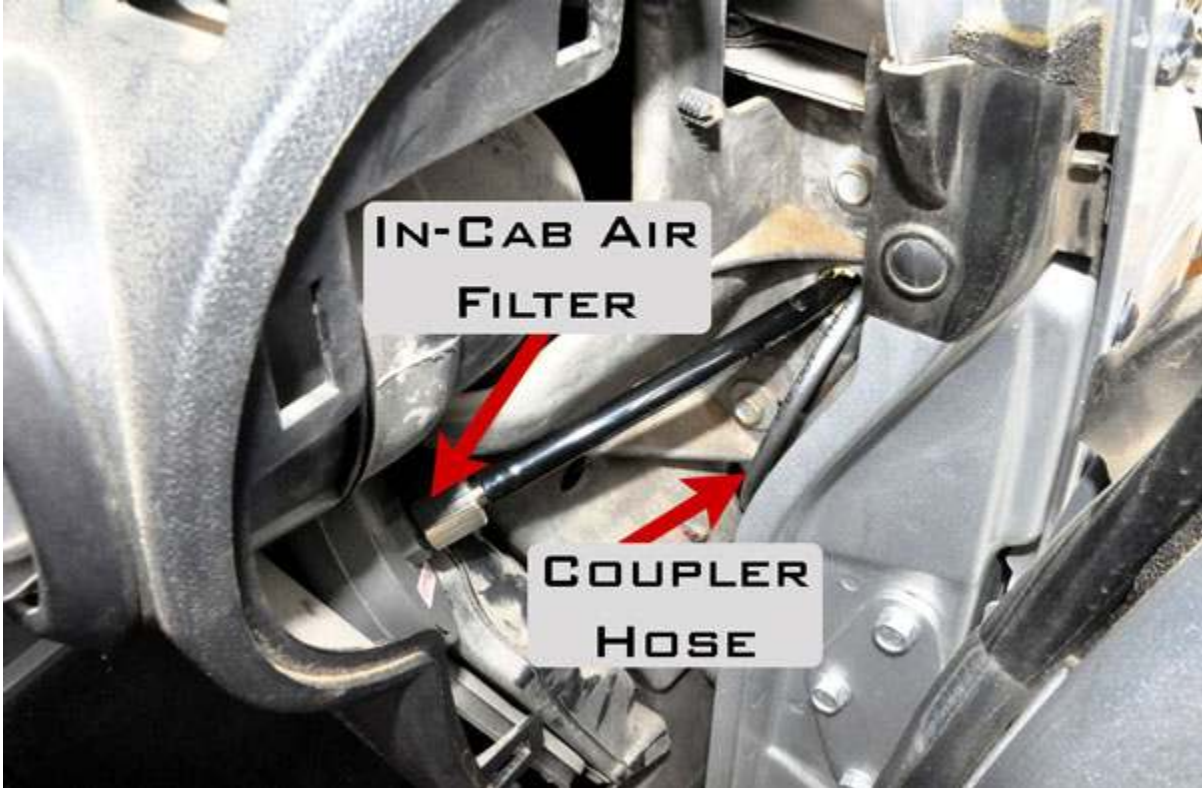
24. Install the Bulkhead Nut and Lockwasher and route the wires over the Air Coupler Assembly:



25. Thread the Hose, up behind to the side of the Dash then through the Foam Filled Access Port to the Engine Bay.

26. Using a 90 degree Brass Fitting and Compression Fitting, attach the In-Cab Air Hose to the Air Tank or Air Junction Box.

27. 3/8" Black Hose and 1/4" FPT X 3/8" Barbed Fitting (Hose and Fitting supplied with compressor) - Rout the air intake hose as indicated in the following two pictures:



28. If using a front bumper air coupler, the following is a clever protected and hidden location:



Options, options, options:

- Dual In-Cab Air Coupler Kits
- Front Bumper High Flow Air Coupler Kit
- Four at Once Tire Filling Hose Assemblies

Visit www.DominionOffRoad.com



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**For the “Super Ultimate JK
OBA Kit” - Order the Jeep JK
Quad Fill Tire Hose
assembly.**

**Google “dominion tire fill”
for a youtube video with
details tips and tricks.**

Visit www.DominionOffRoad.com

